



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,448	07/24/2003	Haruki Hiranuma	S004-5075	9632

7590 06/15/2005
ADAMS & WILKS
50 Broadway
31st Floor
New York, NY 10004

EXAMINER

KYLE, MICHAEL J

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/626,448	Applicant(s) HIRANUMA ET AL.	
	Examiner Michael J. Kyle	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because it is unclear which portion the claimed “frame portion” is referring to. As best understood, the claimed “frame portion” is described as the “case band” 31 in the specification.
2. Claim 1 is objected to because of the limitations of “a support portion” and “the support portions”. It is unclear if there are one, or more than one support portions, and if they are referring to different features. The specification provides for “a support portion in the form in the form of a pivot axle”. The pivot axle is designated with reference numeral 38. The specification also provides for “a pair of support portions or axle fitting portions”, designated by reference numeral 41. As best understood, the “support portion” and “support portions” of the claim are referring to different features, however, this should be made clear in the claim, by using different terminology.
3. Claim 1 is objected to because it is unclear if “a support portion” recited in the 5th line of the claim is the same as “a pivot axle”, recited in the next to last paragraph of the claim. The specification “a support portion in the form in the form of a pivot axle”, therefore, it appears as though the support portion and the pivot axle are the same thing. Claim terminology should remain consistent throughout the claim.
4. Claim 6 is objected to because of the limitations of a “support portion” and “pivot axle”, for the reasons described above in paragraph 3.

Art Unit: 3676

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll (U.S. Patent No. 3,313,101) in view of Tasman (U.S. Patent No. 5,867,871). Carroll discloses a case body (12) with first and second portions and a support portion (at 18). Carroll also discloses a cover member (14) pivotally connected to the case body. Carroll also discloses a transparent member mounted to a surface of the case body (shown in figure 1, covering the face of the instrument 64). The cover member includes at least one support portion (portion of 14 at 18, in figure 6). A pivot axle (18) connects the support portions of the cover member and case body together, to allow pivotal movement. Carroll fails to disclose a pair of hollow bores each having a biasing member compressed therein. While Carroll does disclose a biasing member, this member is not disposed in the hollow bore as claimed.

7. Tasman teaches an assembly comprising an lid (20), a pair of biasing members (37) biasing the lid in the opening and closing directions, a pivot axle, or support portion (32), cover member support portions (33) fit to the pivot axle, and a pair of hollow bores (39). The biasing members are disposed in a compressed state in the hollow bores and provide a spring force to the support portion (33) of the covering member, biasing the cover member toward a first position. Tasman uses this arrangement to allow for controlled movement of the lid, or door, and lock the door in either an opened or closed position (column 5, lines 4-9). It would have been obvious to one having ordinary skill in the art at the time of the invention, to modify Carroll as taught by

Art Unit: 3676

Tasman, such that Carroll's hinge arrangement 18 is replaced by the hinge arrangement of Tasman, in order to lock the lid of Carroll in either an opened or closed position.

8. With respect to claim 19, Tasman shows a pair of transmission bodies (36, see figure 7) disposed between respective biasing members (37) and support portions (33) of the cover member (20) for transmitting biasing forces.

9. Claims 1-3, 5-7, 10-12, 14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll (U.S. Patent No. 3,313,101) in view of Tasman (U.S. Patent No. 5,867,871) and Anderson (U.S. Patent No. 3,851,354). Carroll discloses a portable apparatus with a lid (14) comprising an armor assembly, or time piece armor main portion, with a frame (12) portion, or case band. A glass cover (shown in figure 1, cover 64) is mounted to a surface of the case band, or frame (12), and a case back (integral with 12, bottom portion of figure 2) is mounted to a back face of the case band, or frame (12). The lid (14) is rotatably attached to the frame portion through a pivot axle, or support portion (at 18) allowing pivotal movement of the lid between open and closed positions. The lid further includes at least one support portion, or axle fitting portion (see figure 6, portions of the lid around 18). A spring biases the opening closing lid in it opening and closing directions. Carroll states that "any hinge of conventional construction" can be used to bias the cover 14 (column 2, lines 45-48). Carroll fails to disclose the frame having a hollow bore where the central longitudinal axis of the bore is spaced apart from the pivotal axis of the pivot axle, or a spring member disposed in a compressed state in the hollow bore.

Art Unit: 3676

10. Tasman teaches an assembly comprising an lid (20), a spring (37) biasing the lid in the opening and closing directions, a pivot axle, or support portion (32), a cylindrical axle fitting portion, or support portions (33) fit to the pivot axle, and a hollow bore (39). The spring is a coil spring, and provides a spring force to the support portion (33) of the lid. Tasman uses this arrangement to allow for controlled movement of the lid, or door, and lock the door in either an opened or closed position (column 5, lines 4-9). It would have been obvious to one having ordinary skill in the art at the time of the invention, to modify Carroll as taught by Tasman, such that Carroll's hinge arrangement 18 is replaced by the hinge arrangement of Tasman, in order to lock the lid of Carroll in either an opened or closed position.

11. Anderson teaches a hinge arrangement where one member (23) includes a hollow bore (bound by 61) containing a spring member (45). The arrangement also includes a pivot axle (25). A central longitudinal axis of the hollow bore (bounded by 61) is spaced apart from the pivotal axis of the pivot axle (see figure 7). This arrangement creates a moment that keeps a constant force on the hinge to bias it in the closed direction. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Carroll and Tasman, such that the longitudinal axis of the hollow bore and the pivotal axis of the pivot axle are spaced apart, in order to create a constant moment that biases the lid in a predetermined direction.

12. With respect to claims 2 and 3, the combination of Carroll, Tasman, and Anderson further discloses a transmission body (36 in Carroll) disposed between the spring member and support portion of the lid for transmitting the spring force of the spring member to the support portion. Tasman teaches the spring force, from the spring (37) to be applied to the support portion (33) of the lid to be bias the lid in its closing direction (when the longitudinal axis of the

Art Unit: 3676

bore is spaced apart from the pivotal axis of the pivot axle, as taught by Anderson). The support portion (33) of the lid has an outer curved surface confronting an open end of the hollow bore of the frame portion when the lid is in the open position (see Tasman figure 6)

13. With respect to claim 5, Carroll discloses the apparatus to be a watch.

14. With respect to claim 7, Tasman shows the support portion (33) of the lid has an outer surface with at least one planar surface (35) and at least one curved surface. The planar surface contacts the transmission body in the closed position (see figure 5) and the curved surface contacts the transmission body in the open position of the lid (see figure 6).

15. With respect to claim 10, Carroll discloses a case body (12) with first and second ends and a support portion (at 18). Carroll also disclose a cover member (14) pivotally connected to the case body. The cover member includes at least one support portion (portion of 14 at 18, in figure 6). A pivot axle (18) connects the support portions of the cover member and case body together, to allow pivotal movement. Carroll fails to disclose a hollow bore having a central longitudinal axis that does not intersect the pivotal axis of the pivot axle. While Carroll does disclose a biasing member, this member is not disposed in the hollow bore as claimed.

16. Tasman teaches an assembly comprising an lid (20), a biasing member (37) biasing the lid in the opening and closing directions, a pivot axle, or support portion (32), cover member support portions (33) fit to the pivot axle, and a hollow bore (39). The biasing member is disposed in a compressed state in a hollow bore and provides a spring force to the support portion (33) of the covering member. Tasman uses this arrangement to allow for controlled movement of the lid, or door, and lock the door in either an opened or closed position (column 5, lines 4-9). It would have been obvious to one having ordinary skill in the art at the time of the

Art Unit: 3676

invention, to modify Carroll as taught by Tasman, such that Carroll's hinge arrangement 18 is replaced by the hinge arrangement of Tasman, in order to lock the lid of Carroll in either an opened or closed position.

17. Anderson teaches a hinge arrangement where one member (23) includes a hollow bore (bound by 61) containing a spring member (45). The arrangement also includes a pivot axle (25). A central longitudinal axis of the hollow bore (bounded by 61) is spaced apart from the pivotal axis of the pivot axle (see figure 7) and does not intersect the pivotal axis. This arrangement creates a moment that keeps a constant force on the hinge to bias it in the closed direction. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Carroll and Tasman, such that the longitudinal axis of the hollow bore and the pivotal axis of the pivot axle are spaced apart, in order to create a constant moment that biases the lid in a predetermined direction.

18. With respect to claim 11, Tasman shows a transmission body (36) disposed between the bore and the support portion (33) of the cover member, for transmitting a biasing force to the support portion (33).

19. With respect to claim 12, Tasman shows the support portion (33) of the cover member to have at least one planar surface (35) and one curved surface. The planar surface contacts the transmission body in a first position (see figure 5) and the curved surface in a second position (see figure 6).

20. With respect to claim 14, the combination of Carroll, Tasman, and Anderson further discloses the biasing member (37 of Tasman) applies a biasing force to the support portion (33 of Tasman) to bias the cover member (20 of Tasman) toward a first position (when modified as

Art Unit: 3676

taught by Anderson). The support portion (33) of the lid has an outer curved surface confronting an open end of the hollow bore of the frame portion when the lid is in the second position (see Tasman figure 6)

21. With respect to claim 16, Carroll disclose the portable apparatus to be a watch.

22. With respect to claim 18, Carroll and Tasman teach all of the limitations of claim 17, but fail to disclose the central longitudinal axis of each of the hollow bores to be spaced apart from the pivotal axis of the pivot axle.

23. Anderson teaches a hinge arrangement where one member (23) includes a hollow bore (bound by 61) containing a spring member (45). The arrangement also includes a pivot axle (25). A central longitudinal axis of the hollow bore (bounded by 61) is spaced apart from the pivotal axis of the pivot axle (see figure 7) and does not intersect the pivotal axis. This arrangement creates a moment that keeps a constant force on the hinge to bias it in the closed direction. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Carroll and Tasman, such that the longitudinal axis of the hollow bore and the pivotal axis of the pivot axle are spaced apart, in order to create a constant moment that biases the lid in a predetermined direction.

24. Claim 4, 8, 9, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll in view of Tasman and Anderson as applied to claim 1 above, and further in view of Perkins et al ("Perkins", U.S. Patent No. 6,070,294). Tasman shows an outer circumference face of the lid support portion to have a single planar portion, but fails to show plural planar portions.

Art Unit: 3676

25. Perkins teaches a hinge assembly with a support portion (11), and a spring (45) and transmission body (41), both in a hollow bore hole. Perkins also shows a plurality planar portions (43) on the outer circumference of the support portion. These plural planar portions allow the door, or lid, to be held, and biased, in a number of predetermined positions. It would have been obvious to one having ordinary skill in the art at the time of the invention in order to allow the door to be held, or locked at a plurality of positions.

26. With respect to claims 8, 9, and 13 Perkins shows the support portion (11) to have first (one of surfaces contacting 41 in figure 6) and second planar surfaces (surface diametrically opposite of the a surface contacting 41 in figure 6), where the first surface contacts the transmission body in the closed position of the lid, and the second surface contacts the transmission body in an open position of the lid. The first and second planar surface portions are contiguous with each other.

27. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll in view of Tasman as applied to claim 17 above, and further in view of Perkins. Tasman shows only one planar surface on the support portion of the cover member. However, Perkins teaches a hinge assembly with a support portion (11), and a spring (45) and transmission body (41), both in a hollow bore hole. Perkins also shows a plurality planar portions (43) on the outer circumference of the support portion. These plural planar portions allow the door, or lid, to be held, and biased, in a number of predetermined positions. It would have been obvious to one having ordinary skill in the art at the time of the invention in order to allow the door to be held, or locked at a plurality of positions.

Response to Arguments

28. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection. Examiner has included the patent to Anderson in the rejection of these claims. The new grounds of rejection were necessitated by applicant's amendment to the claim.

Conclusion

29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

30. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

Art Unit: 3676

32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mk


ROBERT J. SANDY
PRIMARY EXAMINER